

AMENDMENTS TO THE CLAIMS

Please **AMEND** claims 1-17 as shown below.

The following is a complete list of all claims in this application.

1. (Presently Amended) A ~~semi-crystalline, largely isotropic~~, porous pitch-based foam produced from a mesophase carbon derived from a petroleum or coal tar pitch exhibiting a softening point above about 300° C, and having a density ~~of between~~ ranging from about 0.1 ~~and to~~ about 0.8 g/cm³.
2. (Presently Amended) The porous ~~coal-based product~~ pitch-based foam of claim 1, wherein said coal tar or petroleum pitch exhibits a softening point ~~between~~ ranging from about 300°C ~~and to~~ about 400° C.
3. (Presently Amended) The porous ~~coal-based product~~ pitch-based foam of claim 1 having a compressive strength below about 6000 psi.
4. (Presently Amended) The porous ~~coal-based product~~ pitch-based foam of claim 1 that has been carbonized.
5. (Presently Amended) The porous ~~coal-based product~~ pitch-based foam of claim 1 that has been graphitized.

6. (Presently Amended) A method for producing a carbon foam from a mesophase carbon particulate derived from a petroleum or coal tar pitch exhibiting a softening point above about 300° C, comprising:

- A) placing said mesophase carbon particulate in a mold;
- B) heating said mesophase carbon particulate in said mold under a non-oxidizing atmosphere to a temperature ~~of between~~ ranging from about 300° C ~~and to~~ about 700° C and soaking at this temperature for a period of from about 10 minutes to about 1 hour to form a green foam; and
- C) controllably cooling said green foam.

7. (Presently Amended) The method of claim 6, wherein said coal tar or petroleum pitch exhibits a softening point ~~between~~ ranging from about 300°C ~~and to~~ about 400° C.

8. (Presently Amended) The method of claim 6, wherein said inert atmosphere is applied at a pressure of from about 0 50 psi ~~up~~ to about 500 psi.

9. (Presently Amended) The method of claim 6, wherein said temperature is achieved using a heat-up rate of ~~between~~ ranging from about 2° C to about 10° C per minute.

10. (Presently Amended) The method of claim 6, wherein said controlled cooling is accomplished at a rate of less than about 10° C/min to a temperature of about 100° C.

11. (Presently Amended) The method of claim 6, wherein said mesophase carbon particulate derived from a petroleum or coal tar pitch exhibiting a softening point above about 300° C is produced by thermal treatment or solvent extraction of said petroleum or coal tar pitch.

12. (Presently Amended) A ~~semi-crystalline, largely isotropic~~, porous pitch-based foam produced from a mesophase carbon derived from a petroleum or coal tar pitch exhibiting a softening point above about 300° C, and having a density of ~~between~~ ranging from about 0.1 ~~and to~~ about 0.8 g/cm³ produced by a method comprising:

A) placing ~~said~~ mesophase carbon particulate in a mold;

B) heating said mesophase carbon particulate in said mold under a non-oxidizing atmosphere to a temperature of ~~between~~ ranging from about 300° C ~~and to~~ about 700° C ~~and soaking at this temperature for a period of from about 10 minutes to about 1 hour to form a green foam; and~~

C) ~~controllably cooling said green foam.~~

13. (Presently Amended) The ~~semi-crystalline, largely isotropic~~, porous pitch-based foam of claim 12, wherein said coal tar or petroleum pitch exhibits a softening point ~~between~~ ranging from about 300°C ~~and to~~ about 400° C.

14. (Presently Amended) The ~~semi-crystalline, largely isotropic~~, porous pitch-based foam of claim 12, wherein said inert atmosphere is applied at a pressure of ranging from about 0 50 psi ~~up~~ to about 500 psi.

15. (Presently Amended) The ~~semi-crystalline, largely isotropic~~, porous pitch-based foam of claim 12, wherein said temperature is achieved using a heat-up rate ~~of between~~ ranging from about 2° C to about 10° C per minute.

16. (Presently Amended) The ~~semi-crystalline, largely isotropic~~, porous pitch-based foam of claim 12, ~~wherein said~~ further comprising the step of controlled cooling the foam is ~~accomplished~~ at a rate of less than about 10° C/min to a temperature of about 100° C.

17. (Presently Amended) The ~~semi-crystalline, largely isotropic~~, porous pitch-based foam of claim 12, wherein said mesophase carbon particulate derived from a petroleum or coal tar pitch exhibiting a softening point above about 300° C is produced by thermal treatment or solvent extraction of said petroleum or coal tar pitch.